IN THE CLAIMS:

On page replacement sheet 7, submitted with Applicants' Response dated August 19, 2004, in line 1, cancel "CLAIMS" and substitute:

--**WE CLAIM AS OUR INVENTION**:-- therefor.

Cancel claims 1-17 on replacement sheets 7-9, filed with Applicants' Response dated August 19, 2004.

1-17 (Cancelled)

Add the following new claims:

18. (New) A congestive heart failure monitor comprising:

an impedance-measuring unit having two electrodes adapted to interact with a patient to measure an impedance representative of a change in a volume of the left atrium of the heart of the patient; and

an analyzing unit supplied with a signal representing said impedance, said analyzing unit including a quotient determining unit that determines a quotient between a minimum value of said impedance and a maximum value of said impedance during a cardiac cycle of said heart, said analysis unit detecting congestive heart failure dependent on said quotient.

19. A monitor as claimed in claim 18 wherein said analysis unit includes an averaging unit that forms an average value of said impedance during a plurality of cardiac cycles of said heart, and wherein said analysis unit additionally uses said average value to detect congestive heart failure.

20. A monitor as claimed in claim 19 comprising a comparator that compares said average value with a predetermined impedance threshold value, to obtain a comparison result, and wherein said analyzing unit detects congestive heart failure dependent on said comparison result.

21. A monitor as claimed in claim 20 wherein said averaging unit forms a floating average value of said impedance during a predetermined number of preceding cardiac cycles for use as said impedance threshold value.

22. A monitor as claimed in claim 18 wherein said analyzing unit comprises a quotient averaging unit that forms an average value of said quotient over a plurality of cardiac cycles of said heart, and wherein said analyzing unit uses said average value of said quotient to detect congestive heart failure.

23. A monitor as claimed in claim 22 wherein said analysis unit comprises a comparator that compares said average value of said quotient with a predetermined quotient threshold value, to obtain a comparison result, and wherein said analyzing unit detects congestive heart failure dependent on said comparison result.

24. A monitor as claimed in claim 23 wherein said quotient averaging unit forms a floating average value of said quotient during a predetermined number of preceding cardiac cycles for use as said quotient threshold value.

25. A monitor as claimed in claim 18 comprising an averaging unit that forms an average value of said impedance during a plurality of cardiac cycles, and a comparator that compares said average value of said impedance to a predetermined impedance threshold value, and a quotient averaging unit that forms an average value of said quotient over said plurality of cardiac cycles, said comparator also comparing said average value of said quotient to a predetermined quotient threshold value to obtain a second comparison result, and said analysis unit detecting congestive heart failure dependent on both said first and second comparison results.

26. A monitor as claimed in claim 18 wherein said electrodes are adapted respectively for implantation in the right atrium and the left atrium of said heart.

27. A monitor as claimed in claim 18 wherein said electrodes are adapted for implantation respective in the right atrium and the left ventricle of said heart.

28. A monitor as claimed in claim 18 comprising a housing adapted for implantation in said patient, said housing containing said impedance-measuring unit and said analyzing unit, and wherein a first of said electrodes is adapted for implantation in the left atrium of said heart, and a second of said electrodes is formed by an exterior of said housing.

29. A monitor as claimed in claim 18 wherein said electrodes are adapted for implantation respective in the left atrium of said heart and the left ventricle of said heart, proceeding in a coronary vein.

30. A monitor as claimed in claim 18 wherein said impedance-measuring unit comprises a measuring circuit formed by a synchronous demodulator for obtaining both real and imaginary parts of said impedance.

31. A monitor as claimed in claim 18 wherein said impedance-measuring unit determines a phase angle of said impedance and wherein said analyzing unit analyzes said phase angle to detect congestive heart failure.

32. A multi-site heart stimulator comprising:

a stimulation unit adapted to interact with cardiac tissue to electrically stimulate said cardiac tissue with pacing pulses;

an impedance-measuring unit having two electrodes adapted to interact with a patient to measure an impedance representative of a change in a volume of the left atrium of the heart of the patient, and an analyzing unit supplied with a signal representing said impedance, said analyzing unit including a quotient determining unit that determines a quotient between a

minimum value of said impedance and a maximum value of said impedance during a cardiac cycle of said heart, said analysis unit detecting congestive heart failure dependent on said quotient; and

a control unit connected to said stimulation unit and to said monitor for controlling delivery of said pacing pulses by said stimulation unit dependent on detection of congestive heart failure by said monitor.